

**METHOD AND APPARATUS FOR INTENTIONAL IMPAIRMENT OF
GASTRIC MOTILITY AND/OR EFFICIENCY BY TRIGGERED ELECTRICAL
STIMULATION OF THE GASTROINTESTINAL TRACT WITH RESPECT
TO THE INTRINSIC GASTRIC ELECTRICAL ACTIVITY**

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ABSTRACT

A sensor based gastric stimulator system and method for gastric stimulation of a patient employing an implantable gastric stimulator, which
10 includes an information processor, an electrical stimulator circuit, and
telemetry circuitry. The implantable stimulator senses intrinsic, gastric
electrical activity (slow waves and/or peristaltic waves) and delivers
electrical stimulation to intentionally disrupt or disorganize that activity.
The stimulation is triggered by (tracks) normal gastric electrical activity and
15 can be delivered with a spatial offset to anticipate the propagating gastric
electrical activity or may be delayed temporally to anticipate the next
propagating slow or peristaltic wave. The stimulator may be programmed
to disrupt/disorganize all or a percentage of the intrinsic, normal gastric
electrical activity. The programmer (via radio frequency data link) may
20 non-invasively program stimulation parameters and intervals. The
stimulator may provide stimulation to one or a plurality of stimulation sites
and may incorporate one or a plurality of independently programmable
sensing and/or stimulation channels. The information processor of the
implantable gastric stimulator uses the gastric stimulation information from
25 the non-electrode sensor for determining periods or windows of
susceptibility for application of the electrical signals conveyed with the
stimulation electrode for conveying electrical signals from the electrical
stimulator circuit to the stomach wall of the patient.